

A SYNOPSIS OF THE GENUS SUESSENGUTHIA (ACANTHACEAE)

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During the course of routine identifications of Acanthaceae from South America, I have found two undescribed species of the genus *Suessenguthia* Merxmüller. In an attempt to make proper placement of the species, the monograph of *Sanchezia* and related genera (Leonard & Smith, 1964) was used. In this paper *Sanchezia leucerythra* was described as a new species. After examining the type, its four fertile appendaged stamens indicate that it should be transferred to the genus *Suessenguthia*. The two new species are described and the new combination is made. A key is also provided. The loan of material from the New York Botanical Garden is gratefully acknowledged.

SUESSENGUTHIA

H. Merxmüller, *Mitteilungen der Botanischen Staatssammlung München* [1], Heft 6: 178, pl. 1953. (Type species, *Suessenguthia trochilophila* Merxm.)

Shrubs; stems erect, quadrangular, sulcate; leaves opposite, short-petioled, cystoliths conspicuous; flowers solitary or fascicled, usually large and conspicuous, borne in heads, spikes or cymes, the flower cluster subtended by small or often large and partly connate bracts, these sometimes colored; calyx 5-parted, the segments subequal; corolla lilac or red, the tube cylindric, 5-lobed, the lobes equal; stamens 4, the longer two exserted, the shorter two included or barely reaching the throat of the corolla; anthers 2-celled, longitudinally ciliate, mucronate at base; ovary disc minute, sessile; style glabrous; ovules 4 per locule.

The species of *Suessenguthia* can be distinguished by the following key:

- a. Inflorescence capitate or cymose.
 - b. Inflorescence capitate; bracts ovate, acuminate, corolla minutely pubescent 1. *S. leucerythra*
 - b. Inflorescence cymose; bracts obovate, caudate; corolla densely sericeous 2. *S. vargasii*

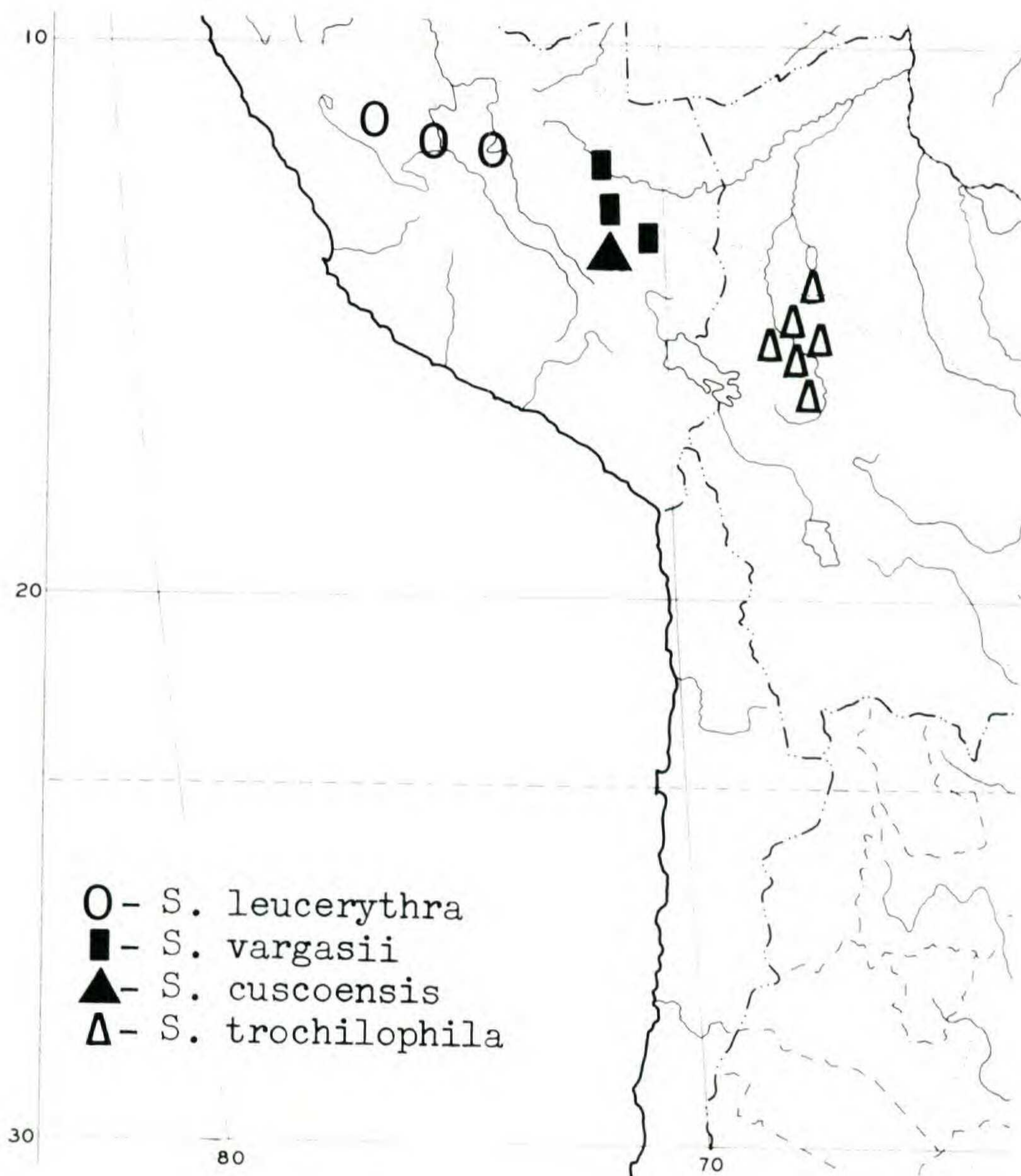


Fig. 1. Distribution of *Suessenguthia*.

a. Inflorescence spicate.

c. Fascicles all sessile in elongated spikes; bracts subtending the floral cluster elliptic 3. *S. cuscoensis*

c. Basal fascicles of flowers pedunculate; bracts subtending the floral cluster triangular-cuspidate 4. *S. trochilophila*

1. ***Suessenguthia leucerythra*** (Leonard & Smith) Wasshausen, comb. nov. *Sanchezia leucerythra* Leonard & Smith, *Rhodora* 66: 318. 1964.

PERU: Junín: dense forest near Perene Bridge, Río Paucartambo Valley, 700 m, June 19, 1929, *E. P. Killip & A. C. Smith* 25271 (Holotype NY!).

Shrub 2-5 m tall, stem quadrangular, glabrous, sulcate; leaf blades lanceolate, up to 18 cm long and 5 cm wide, acuminate, the tip itself obtuse, the upper surface glabrous, minutely papillose, cystoliths numerous, 0.25 mm long, on the lower surface the costa and lateral veins (ca 8 pairs) conspicuous, pilose, the hairs appressed, the margins short repand-crenate; petiole up to 2 cm long, appressed-pilose; inflorescence capitate, 3.5 cm long, 3 cm wide; lowermost bracts lanceolate, up to 4.5 cm long, 1.5 cm wide, acuminate, pilose, the hairs appressed, 0.5 mm long, bracts subtending the flower cluster ovate, 3 cm long, 1.3 cm wide, acuminate, sericeous, the hairs appressed and 1 mm long, distally deep pink-purple, basally white; bractlets 3 cm long, 1 cm wide, acuminate, sericeous, the hairs appressed, 0.5 mm long, brown; calyx segments 27-30 mm long, 2-6 mm wide, subequal, linear-lanceolate, slender-acuminate, sericeous; corolla pale red, basally white, 4-4.5 cm long, basally 3-5 mm wide, 10 mm wide at throat, minutely pubescent with recurved hairs, the lobes ca 10-15 mm long, broadly rounded and short-emarginate, erect, densely retrorsely pubescent; stamens 4, cream white, the two longer exerted 7-10 mm beyond the throat of the corolla, the two shorter included and barely reaching the throat of the corolla; ovary pilose; fruit not seen.

OTHER SPECIMENS EXAMINED: PERU: Junín: open place in forest, Río Negro, 800 m, August 14, 1960, *F. Woytkowski* 5794 (US); Cusco: Prov. de La Convencion, "Subiendo a Ichigurato; Alto Urubamba", April 16, 1966, *C. Vargas C.* 17235 (CUZ, US).

2. *Suessenguthia vargasii* Wasshausen, sp. nov.

PERU: Cusco: Prov. de Quispicanchis, forest, between Quince Mil and San Lorenzo, 700 m, July 25, 1957, *C. Vargas C.* 11732 (Holotype US! Isotype CUZ).

Frutex, caulibus quadrangularibus; folii lamina oblongo-elliptica acuminata, apice curvata, basi angustata, glabra, integra vel undulata, costa et venis prominentibus; inflorescentia pauciramosa, cymosa, floribus in fasciculis;

bracteae obovatae, caudatae, sericeae; bracteolae anguste oblongae, acuminatae; calycis segmenta lanceolata vel oblanceolata, subaequalia, sericea; corolla pallide rubra, dense sericea, lobis late rotundatis et leviter emarginatis; stamina 4, longiora exserta, breviora sub-exserta; ovarium dense sericeum.

Shrub 2-5 m tall, stem quadrangular, glabrous, sulcate; leaf blades oblong-elliptic, 10-16 cm long, 3.5-5 cm wide (the lowermost probably larger), gradually narrowed to a slender curved apex (the tip blunt), narrowed at base, glabrous, entire or undulate, the costa and lateral veins (6 to 8 pairs) prominent beneath; petioles 5-12 mm long, connate at base by a small ridge or narrow band of leaf tissue; flowers borne in fascicles in a few-branched cymose inflorescence, 4 cm long, 2 cm wide; lowermost bracts obovate, up to 2 cm long, 1.3 cm wide, caudate, sericeous, the hairs appressed, yellowish; bracts subtending the flower cluster obovate, up to 3 cm long, 1.3 cm wide, caudate, densely sericeous, the hairs appressed, yellow; bractlets narrowly oblong, 3 cm long, 7 mm wide, acuminate, densely sericeous, the hairs appressed, distally deep pink purple; calyx segments up to 30 mm long, subequal, 4-5 mm wide, lanceolate to oblanceolate, slender-acuminate, sericeous; corolla drying pale red, 4-6 cm long, basally 4 mm wide, 8 mm wide at throat, densely sericeous with appressed hairs, these 2.5 mm long, the lobes 10-15 mm long, broadly rounded and short-emarginate, erect or spreading, sericeous, the hairs spreading; stamens 4, the longer two exserted, the shorter two barely reaching the throat of the corolla; style 5 cm long, glabrous; ovary densely sericeous; fruit not seen.

OTHER SPECIMENS EXAMINED: PERU: Cusco: Prov. de Paucartambo, forest, Kosñipata, between Pilcapata — Atalaya, 450-550 m, August 5, 1956, *C. Vargas* C. 11289 (CUZ, US); Madre de Dios: Prov. de Manu, "Synduya?", 400 m, October 6, 1966, *C. Vargas* C. 17831 (CUZ, US).

3. *Suessenguthia cuscoensis* Wasshausen, sp. nov.

PERU: Cusco: Prov. de Paucartambo, forest, Kosñipata, between Pilcapata — Atalaya, 450-550 m, August 5, 1956, *C. Vargas* C. 11288 (Holotype US! Isotype CUZ).

Frutex, caulibus quadrangularibus pilosis sulcatis; folii

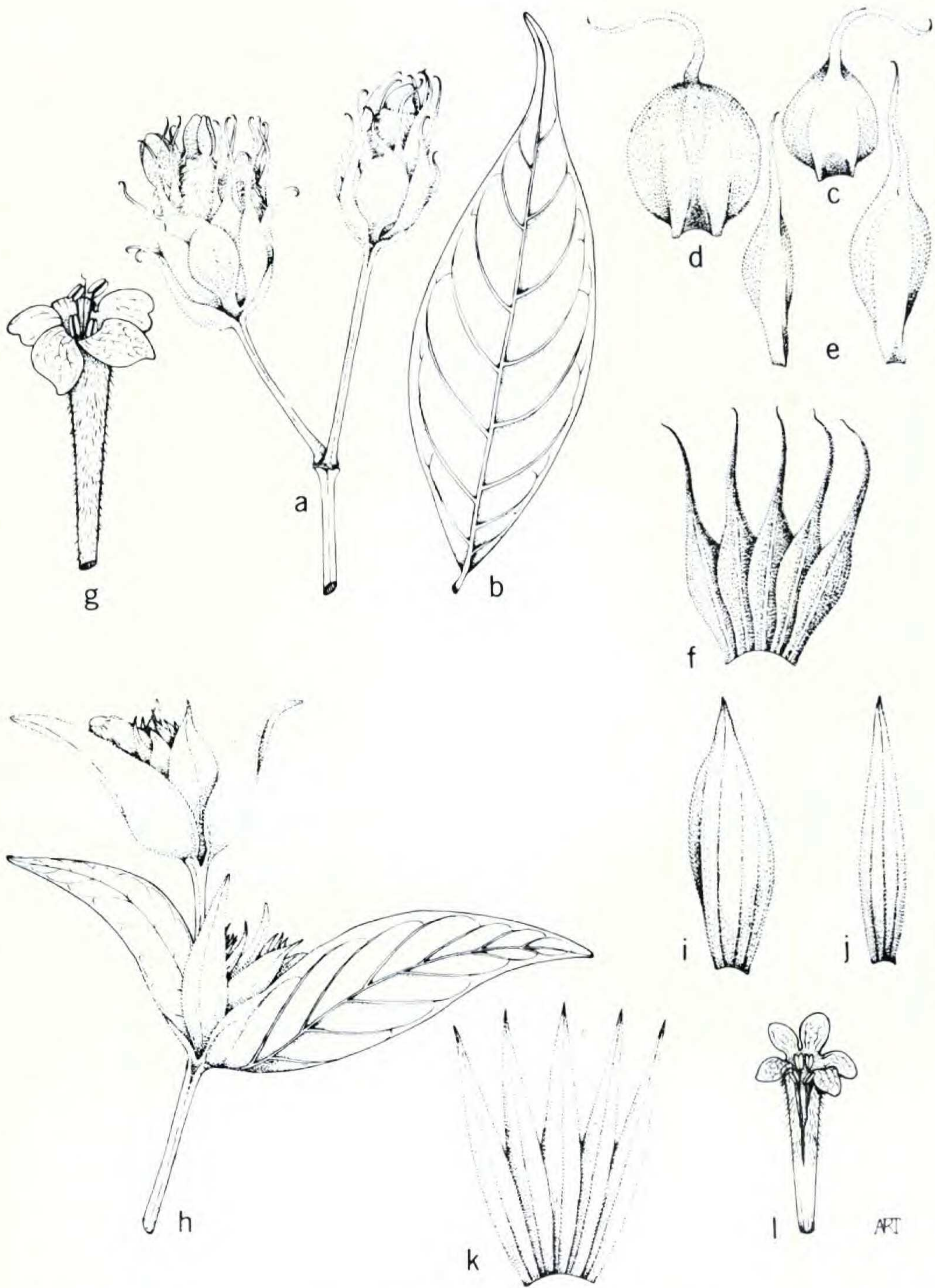


Fig. 2. *Suessenguthia vargasii* (a-f): a — inflorescence $\times \frac{1}{2}$; b — leaf blade $\times \frac{1}{2}$; c — lowermost bract $\times 1$; d — bract $\times 1$; e — bractlets $\times 1$; f — calyx $\times 1$; g — corolla $\times \frac{1}{2}$; *Suessenguthia cuscoensis* (h-l): h — inflorescence $\times \frac{1}{2}$; i — bract $\times 1$; j — bractlet $\times 1$; k — calyx $\times 1$; l — corolla $\times \frac{1}{2}$.

lamina elliptica acuminata, apice ipso obtuso, ad basim in petiolum decurrens, supra glabra, subtus parce pilosa costa et venis lateralibus obscuris; spicae terminales et axillares, floribus pluribus in fasciculis sessilibus congestis; bracteae ellipticae, acuminatae, parce sericeae; bracteolae lanceolatae, acuminatae, parce sericeae; calycis segmenta lanceolata, subaequalia, parce sericea; corolla laete rubra sericea, lobis late rotundatis et leviter emarginatis; stamina 4, vix exserta; ovarium dense sericeum.

Shrub 2-5 m tall, the stem quadrangular, sulcate, pilose, the hairs appressed; leaf blades elliptic, up to 16 cm long and 7 cm wide (the lowermost probably larger), acuminate, the tip itself obtuse, attenuate at base and decurrent on the petiole, firm, the upper surface glabrous, minutely papillose, cystoliths numerous, on the lower surface the costa and lateral veins rather inconspicuous, sparingly pilose, the hairs appressed, the margins short repand-crenate; petioles up to 1.5 cm long, connate at base by a small ridge or narrow band of leaf tissue; flowers borne in sessile fascicles in axillary and terminal spikes, these lax, internodes 2-3 cm long, sericeous, the hairs appressed; lowermost bracts ovate, 3-9 cm long, 1.5-2.5 cm wide, acuminate, thinly sericeous, the hairs appressed; bracts subtending the flower cluster elliptic, 2.8-3.5 cm long, 0.7-1.3 cm wide, acuminate, thinly sericeous, the hairs white, appressed, 1 mm long; bractlets lanceolate, 2.3 cm long, 4 mm wide, acuminate, thinly sericeous, the hairs appressed; calyx segments lanceolate, 1.8 cm long, subequal, 3-4 mm wide, acuminate, thinly sericeous, the hairs white, appressed; corolla drying pale red, 4 cm long, basally 3 mm wide, 7 mm wide at throat, sericeous with appressed hairs 1 mm long, the lobes 7-9 mm long, broadly rounded and short-emarginate, erect, sericeous, the hairs appressed; stamens 4, barely exceeding the throat of the corolla; style glabrous; ovary densely sericeous; fruit not seen.

4. *Suessenguthia trochilophila* Merxm. in *Mitteil. Bot. Staatss. München* [1], Heft 6: 178, *pl. 1953*; *Rhodora* **66**: 343. 1964.

BOLIVIA: at the foot of the Andes near Rurrenabaque, on the right bank of the Rio Beni, September 23, 1951, *G. Niethammer* 208 (Holotype M).

Shrub 1.5-2 m tall, stem quadrangular, sulcate, glabrous; leaf blades broadly lanceolate, up to 25 cm long and 10 cm wide, subacute, basally narrowed and decurrent on the petiole, firm, the upper surface glabrous, minutely papillose, cystoliths numerous, on the lower surface the costa and lateral veins (ca 8-10 pairs) prominent, the margins repand-crenate; petioles up to 1.5 cm long, connate at base by a small ridge or narrow band of leaf tissue; flowers borne in sessile fascicles in terminal 2-3-branched spikes, these lax, the internodes 1.5-2.5 cm long, sparingly sericeous, the hairs spreading; lowermost bracts broadly ovate, 2-2.5 cm long, 1.5-2 cm wide, acuminate, glabrous or very sparingly sericeous; bracts subtending the floral cluster triangular-cuspidate, 2.6-2.8 cm long, 1-1.3 cm wide, sparingly pilose, the hairs appressed, 1 mm long; bractlets narrowly lanceolate or subulate, 1.8 cm long, 4 mm wide, long acuminate, thinly sericeous, the hairs appressed; calyx segments lanceolate, subequal, 2.2-2.4 cm long and 0.3-0.5 cm wide, acuminate, thinly sericeous, the hairs white, appressed; corolla rose-lilac, 4.5 cm long, basally 3 mm wide, 1 cm wide at throat, glabrous, the lobes 12 mm long, apically rounded, spreading not revolute, glabrous; stamens 4, the two longer sub-exserted, the two shorter included in the corolla tube; style 3.7 cm long, long exserted, glabrous; ovary ovate, apically pilose; fruit not seen.

OTHER SPECIMENS EXAMINED: BOLIVIA: Beni: Rurrenabaque, 300 m, November 1921, *H. H. Rusby* 850 (NY, US); La Paz: wet sand near river, in shade, near Coroico, Yungas, August 2, 1894, *M. Bang* 2367 (GH, NY, US); Guanai, 600 m, May 1886, *H. H. Rusby* 1119 (US); woods, San Carlos, Mapiri, 700 m, August 1907, *O. Buchtien* 1403 (NY, US); San Bartolome (near Calisaya), basin of Río Bopi, Prov. S. Yungas, 750-900 m, July 1929, *B. A. Krukoff* 10186 (US); Asunta (near Evenay), Prov. S. Yungas, 690-750 m, July 1939, *B. A. Krukoff* 10585 (US).

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